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MONTANA GRAINS

WHEAT PROTEIN

BARLEY AND OATS VARIETIES

and

DISPOSITION

1954 Crop

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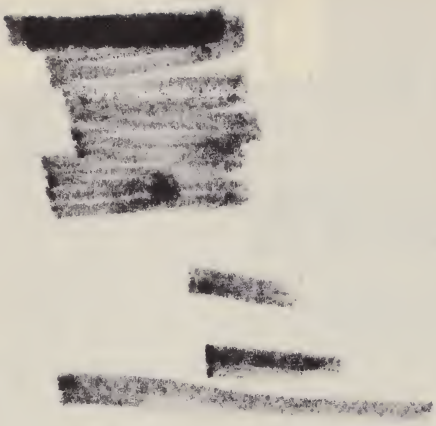

MONTANA GRAINS

Wheat Production by Protein Content Groups
For
Established Cropping Practices
and
Principal Wheat Producing Counties
1954 Crop

Premiums Offered for Protein in Wheat
Av. 1943-52, 1953 and 1954

Barley Acreage Planted and Production by Varieties
1954 Crop

Oats Acreage Planted and Production by Varieties
1954 Crop

Barley and Oats Stocks and Disposition
1954 Supply

MONTANA DEPARTMENT OF AGRICULTURE
ALBERT H. KRUSE, Commissioner

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service

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PURPOSE OF BULLETIN

This bulletin presents information for Montana relating to 1954 wheat production by protein percentage groups which continues a series started with the 1951 wheat crop. The estimates were prepared from reports submitted by 2,560 farmers in January and February, 1955. Acreage and production of barley and oats by varieties for 1954 and disposition of the 1954 supply of barley and oats was assembled from 2,380 farm reports as of April 1, 1955. These new data help to meet the need for information regarding two important crops commonly grown by most farmers and ranchers in the State.

For this project, State funds were matched with Federal funds received from the Agricultural Stabilization and Conservation Service, U. S. D. A., under provisions of the Agricultural Marketing Act of 1946.

MONTANA WHEAT PROTEIN

Montana is favored by climate and soils suitable for the growing of good quality wheat of high protein content. Premiums are regularly offered for wheats of high protein content and in recent years the premiums have been unusually high. In some instances the premiums for wheat containing 17 percent and more protein have amounted to one-third of the selling price.

MONTANA WHEAT PRICES

Cash Prices and Protein Premiums at Great Falls*

CROP YEAR** AND MONTH	DARK NORTHERN AND NORTHERN SPRING WHEAT					DARK HARD AND HARD WINTER WHEAT				
	Base Price No. 1 Heavy	Protein Premium			Percent 15% Protein Premium is of Base Price	Base Price No. 1 Heavy	Protein Premium			Percent 16% Protein Premium is of Base Price
		15%	16%	17%			14%	15%	16%	
		Cents per Bushel			Percent		Cents per Bushel			Percent
Av. 1943-52	174.1	13.6	19.6	25.4	11.3	173.5	8.0	12.2	17.0	7.0
1953	182.4	28.9	40.5	47.9	22.2	181.7	16.5	23.2	29.7	12.8
1954	197.7	33.4	45.7	48.8	23.1	188.2	22.6	29.1	36.0	15.5
1954—										
July	180.0	57.0	77.0	87.0	42.8	183.0	30.0	40.0	48.0	21.9
August	187.0	37.0	47.0	57.0	25.1	187.0	19.0	24.0	29.0	12.8
September	200.0	24.0	32.0	33.0	16.0	193.0	18.0	21.0	24.0	10.9
October	197.0	30.0	38.0	39.0	19.3	182.0	33.0	36.0	39.0	19.8
November	199.0	39.0	49.0	51.0	24.6	185.0	35.0	40.0	54.0	21.6
December	197.0	35.0	45.0	47.0	22.8	184.0	27.0	35.0	39.0	19.0
January	202.0	28.0	38.0	40.0	18.8	191.0	16.0	24.0	30.0	12.6
February	200.0	24.0	34.0	36.0	17.0	192.0	16.0	22.0	27.0	11.5
March	205.0	23.0	37.0	39.0	18.0	190.0	19.0	26.0	34.0	13.7
April	197.0	30.0	45.0	47.0	22.8	187.0	21.0	28.0	36.0	15.0
May	203.0	36.0	52.0	54.0	25.6	188.0	20.0	29.0	38.0	15.4
June	206.0	38.0	54.0	56.0	26.2	197.0	17.0	24.0	34.0	12.2

*Simple averages of quotations extracted from the Great Falls Tribune for one day each month centering mid-month.

**July of year shown to June following year.

Wheat protein varies considerably with the variety of wheat, the climatic conditions under which the crop is grown and the type of soils on which it is grown. The protein in Montana's winter wheat fluctuates little from year to year but the amount of protein in spring wheat registers much change with abnormal and sub-normal moisture. In 1951, when moisture was short in the principal spring wheat areas, over 55 percent of the spring wheat production contained 15 percent or more protein. In contrast to this, the bumper 1953 spring wheat crop, grown with abundant supplies of moisture, contained much less protein and only 28 percent of the production came under the 15 percent and more protein category. Protein development was better in 1954 and about 51 percent of the spring wheat crop was in the high protein group. Some 1954 spring wheat grown in Eastern Montana was of exceptionally high protein content and for the State as a whole, the quantity with 18 percent and more protein was much larger than for either of the three previous years.

PRODUCTION OF WHEAT BY PROTEIN CONTENT GROUPS AND CROPPING PRACTICES—1954

Protein Group	Cropping Practices: Irrigated	Summer Fallow Land	Other Dry Land	Volunteer	Total: Bushels	Total: Percent
	Bushels Produced					
ALL WHEAT						
10.9 and Under	269,100	1,377,700	173,500	900	1,821,200	2.4
11.0 - 11.9	1,133,500	4,189,000	196,300	1,500	5,520,300	7.2
12.0 - 12.9	1,246,500	9,614,600	456,600	1,700	11,319,400	14.8
13.0 - 13.9	1,080,000	12,161,500	690,300	2,600	13,934,400	18.2
14.0 - 14.9	603,900	16,263,100	730,600	2,600	17,600,200	23.0
15.0 - 15.9	227,600	10,527,900	717,700	2,600	11,475,800	15.0
16.0 - 16.9	39,300	6,796,400	735,400	1,500	7,572,600	9.9
17.0 - 17.9	10,400	4,168,300	405,900	200	4,584,800	6.0
18.0 and Over	.....	2,439,300	289,000	.....	2,728,300	3.5
Total	4,610,300	67,537,800	4,395,300	13,600	76,557,000	100.0
Average % Protein	12.9	14.5	14.9	13.9	14.4	
WINTER WHEAT						
10.9 and Under	93,400	1,354,200	141,400	900	1,589,900	4.7
11.0 - 11.9	532,100	4,085,200	90,000	1,500	4,708,800	14.0
12.0 - 12.9	400,900	8,619,600	192,600	1,700	9,214,800	27.4
13.0 - 13.9	246,900	6,396,700	238,300	2,600	6,884,500	20.5
14.0 - 14.9	58,700	6,671,900	188,300	2,600	6,921,500	20.6
15.0 - 15.9	25,200	2,523,900	100,400	2,600	2,652,100	7.9
16.0 - 16.9	1,300	1,296,000	45,500	1,500	1,344,300	4.0
17.0 - 17.9	.....	238,300	9,400	200	247,900	.8
18.0 and Over	.....	40,500	700	.....	41,200	.1
Total	1,358,500	31,226,300	1,006,600	13,600	33,605,000	100.0
Average % Protein	12.3	13.4	13.3	13.9	13.4	
SPRING WHEAT						
10.9 and Under	175,700	23,500	32,100	.....	231,300	.5
11.0 - 11.9	601,400	103,800	106,300	.....	811,500	1.9
12.0 - 12.9	845,600	995,000	264,000	.....	2,104,600	4.9
13.0 - 13.9	833,100	5,764,800	452,000	.....	7,049,900	16.4
14.0 - 14.9	545,200	9,591,200	542,300	.....	10,678,700	24.9
15.0 - 15.9	202,400	8,004,000	617,300	.....	8,823,700	20.5
16.0 - 16.9	38,000	5,500,400	689,900	.....	6,228,300	14.5
17.0 - 17.9	10,400	3,930,000	396,500	.....	4,336,900	10.1
18.0 and Over	.....	2,398,800	288,300	.....	2,687,100	6.3
Total	3,251,800	36,311,500	3,388,700	.....	42,952,000	100.0
Average % Protein	13.1	15.4	15.4	.....	15.2	

MONTANA WHEAT PRODUCTION BY PROTEIN GROUPS FOR PRINCIPAL WHEAT PRODUCING COUNTIES—1954

COUNTY*	Total Production	14.9 Percent and less Protein	15.0 Percent and more Protein		Average Percent Protein in Wheat
			Quantity	Percent of Total	
	Bushels				
Hill	7,072,900	3,114,600	3,958,300	56.0	15.1
Roosevelt	3,019,500	548,000	2,471,500	81.9	15.9
Valley	2,961,500	1,065,900	1,895,600	64.0	15.5
McCone	2,024,300	213,600	1,810,700	89.4	17.5
Chouteau	10,101,700	8,695,300	1,406,400	13.9	13.6
Liberty	3,940,300	2,712,200	1,228,100	31.2	14.5
Phillips	1,583,200	386,800	1,196,400	75.6	15.4
Dawson	1,553,700	422,500	1,131,200	72.8	16.7
Richland	1,571,200	476,100	1,095,100	69.7	15.4
Toole	2,769,100	1,774,900	994,200	35.9	13.9
Blaine	1,595,600	618,400	977,200	61.2	15.2
Daniels	2,290,700	1,333,900	956,800	41.8	14.4
Fallon	834,200	102,100	732,100	87.8	16.6
Wibaux	852,900	205,300	647,600	75.9	15.1
Sheridan	2,535,400	1,925,600	609,800	24.1	14.1
Yellowstone	1,863,800	1,335,800	528,000	28.3	13.9
Garfield	455,200	43,700	411,500	90.4	17.0
Big Horn	1,276,000	866,600	409,400	32.1	14.7
Pondera	3,575,500	3,177,400	398,100	11.1	13.5
Fergus	4,294,200	3,903,200	391,000	9.1	12.6
Powder River	374,300	30,900	343,400	91.7	17.5
Stillwater	1,047,900	705,800	342,100	32.6	14.5
Prairie	478,700	152,500	326,200	68.1	15.8
Judith Basin	1,712,500	1,401,300	311,200	18.2	13.5
Carter	240,700	40,300	200,400	83.3	17.1
Rosebud	427,300	232,200	195,100	45.7	13.9
Custer	263,900	75,800	188,100	71.3	15.2
Teton	3,994,000	3,817,900	176,100	4.4	12.7
Cascade	3,497,000	3,351,000	146,000	4.2	12.6
Broadwater	491,900	368,500	123,400	25.1	14.0
Golden Valley	227,900	108,200	119,700	52.5	14.7
Gallatin	1,730,400	1,620,200	110,200	6.4	11.8
Carbon	587,200	483,800	103,400	17.6	13.6
Musselshell	266,400	169,700	96,700	36.3	15.0
Park	444,600	382,700	61,900	13.9	13.2
Glacier	906,200	852,900	53,300	5.9	12.8
Sweetgrass	153,000	103,200	49,800	32.5	14.3
Lewis & Clark	357,300	311,200	46,100	12.9	12.6
Treasure	119,400	79,800	39,600	33.2	14.0
Other Counties	3,065,500	2,985,700	79,800	2.6	11.8
STATE	**76,557,000**	**50,195,500**	**26,361,500**	**34.4**	**14.4**

WINTER WHEAT AND SPRING WHEAT—1951 TO 1954

1951—Winter Wheat	28,681,000	25,645,500	3,035,500	10.6	13.0
Spring Wheat	66,352,000	29,516,700	36,835,300	55.5	14.9
1952—Winter Wheat	28,818,000	25,564,000	3,254,000	11.3	13.2
Spring Wheat	54,730,000	28,412,300	26,317,700	48.1	14.6
1953—Winter Wheat	28,602,000	25,198,000	3,404,000	11.9	12.9
Spring Wheat	85,728,000	61,553,000	24,175,000	28.2	14.1
1954—Winter Wheat	33,605,000	29,319,500	4,285,500	12.8	13.4
Spring Wheat	42,952,000	20,876,000	22,076,000	51.4	15.2

*County arrangement based on production of 15.0 percent and more protein.

MONTANA BARLEY AND OATS

Montana is recognized as a prominent wheat and livestock producing State. During recent years it has held, among all States, third position in total wheat production, second in spring wheat; fourth in numbers of stock sheep and sixth in numbers of beef animals. Although most of its beef cattle and lambs are shipped to other areas for fattening, large amounts of feed grains are used for the wintering of cattle and sheep. The bulk of the feed grains is comprised of barley and oats.

Last year the State's barley crop was exceeded by only two other States and Montana is expected to hold third position with large production again this year. Barley gained prominence in Montana during the early 1940's when the acreage was tripled in a three-year period. Oats was the principal grain in the State during the early development period and its acreage exceeded the wheat acreage prior to 1911. Oats acreage reached a peak in 1918 when horse numbers were at a high level. Since 1940 the acreage has been rather stable.

BARLEY VARIETIES—1954

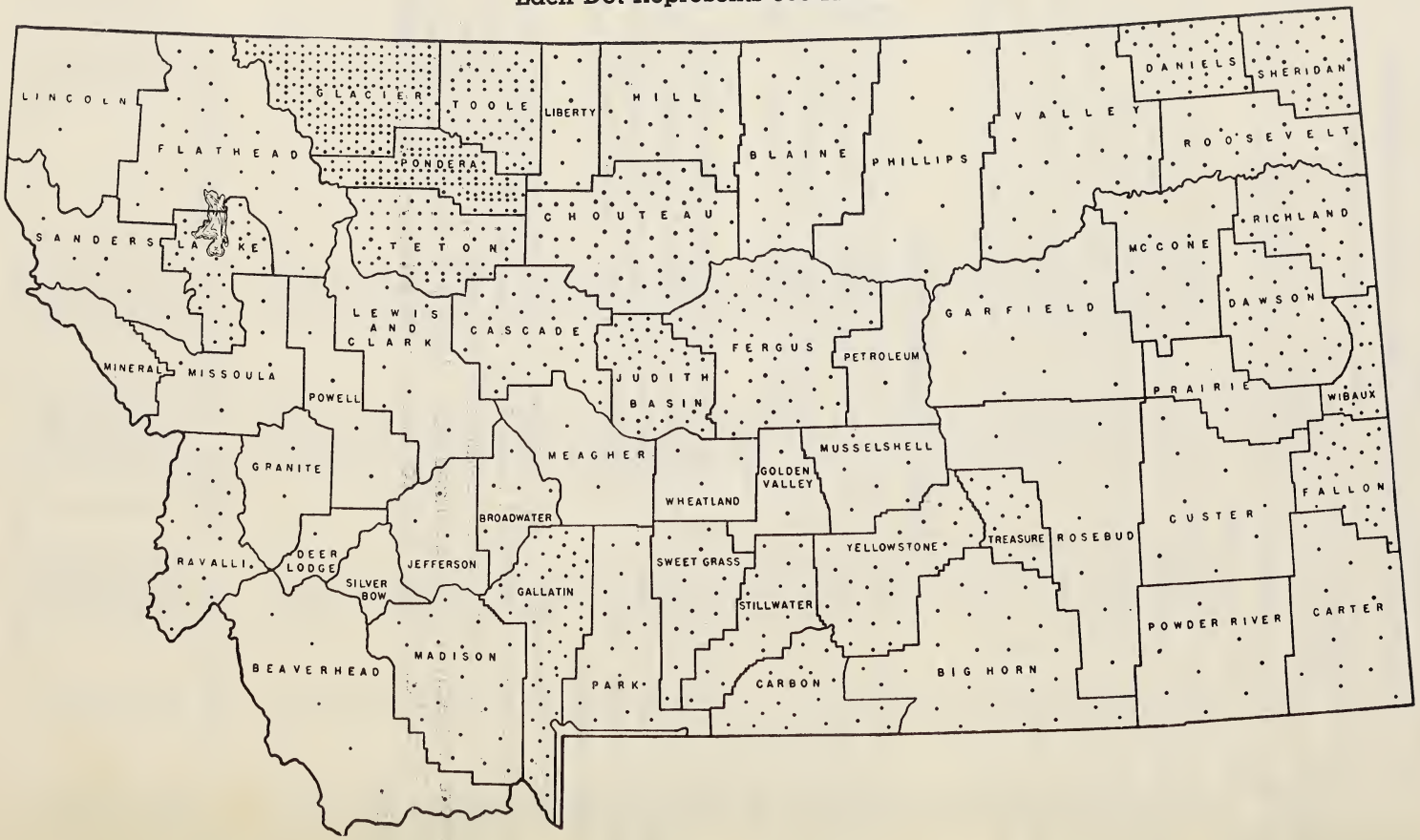
Last year the Compana variety of barley was seeded on 1,180,000 acres; 86.3 percent of the 1,368,000 acres of all barley seeded in the State. Varieties accounting for most of the remaining acreage and the percentage each was of all barley are as follows: Titan, 4.4 percent; Horn, 2.0; Glacier, 1.9; Sanalta, 1.2; Vantage, .9 and Trebi, .8 percent.

Grown generally over the State, Compana's percentage is highest in north central, central and southwestern districts. Although adapted to dry land farming, about 6.5 percent of the 1954 seeded acreage was irrigated land. The yield per seeded acre for Compana grown on dry land was well above that for other varieties.

Titan is also grown in most counties and last year more than one-third of the seedings were on irrigated land. Most of the Glacier and Trebi is seeded in western and south central areas and last year 42 and 58 percent of the acreage respectively was irrigated land. Nearly all of the acreage seeded in 1954 to Horn, Sanalta and Vantage was non-irrigated and was in northeastern counties.

BARLEY ACREAGE PLANTED IN 1953

Each Dot Represents 500 Acres



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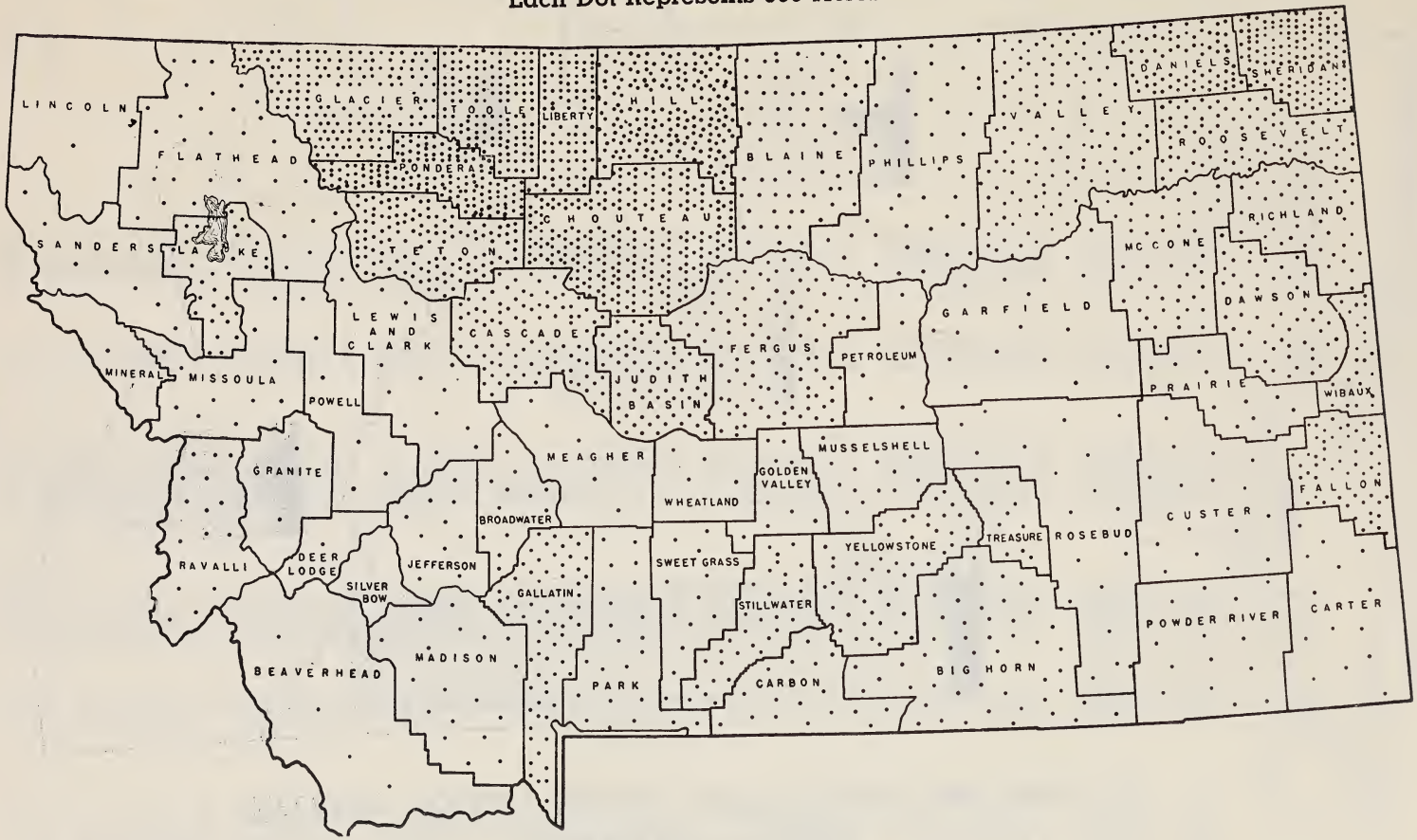
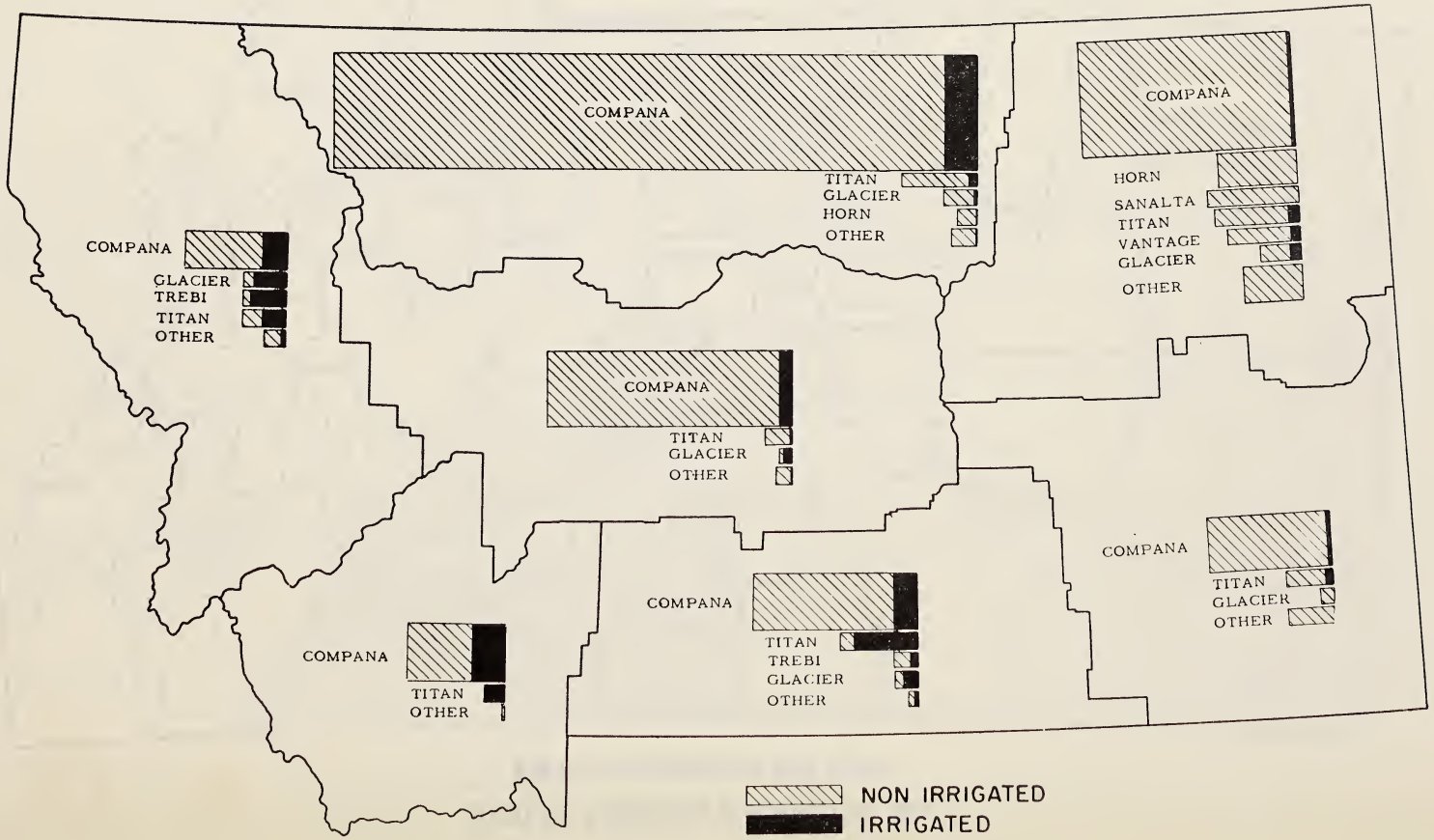


BARLEY – 1954

Relative Acreage Seeded – by Districts and Varieties



ALL BARLEY AND COMPANA BARLEY—1954

Acres Planted, Yield Per Planted Acre and Production

COUNTY & DISTRICT	ALL BARLEY			COMPANA BARLEY		
	Planted Acres	Production: Yield per Planted Acre	Production: Total	Planted Acres	Production: Yield per Planted Acre	Production: Total
		Bushels			Bushels	
Deer Lodge	500	30.6	15,300	.....	.....	.....
Flathead	17,600	30.5	536,400	16,000	30.2	483,000
Granite	1,300	28.0	36,400	200	28.0	5,600
Lake	16,100	26.6	429,000	7,000	24.9	174,400
Lincoln	500	28.8	14,400	.....	.....	.....
Mineral	500	26.8	13,400	100	29.0	2,900
Missoula	6,100	42.9	261,600	4,400	43.6	192,000
Powell	3,200	27.9	89,200	3,000	32.6	97,700
Ravalli	7,500	44.5	333,800	1,100	38.2	42,000
Sanders	3,900	25.7	100,200	1,300	31.0	40,300
NORTHWESTERN	**57,200**	**32.0**	**1,829,700**	**33,100**	**31.4**	**1,037,900**
Blaine	38,600	24.3	939,000	36,800	21.4	787,000
Chouteau	130,400	33.8	4,402,000	123,200	31.0	3,822,400
Glacier	80,100	21.3	1,707,000	80,100	21.3	1,707,000
Hill	97,500	30.9	3,011,900	89,000	29.0	2,584,600
Liberty	46,100	30.5	1,408,000	43,800	32.0	1,401,600
Phillips	24,200	24.8	599,700	23,000	24.3	559,700
Pondera	79,000	33.0	2,607,000	78,400	33.7	2,641,200
Teton	64,100	30.2	1,936,100	63,700	30.5	1,941,000
Toole	70,400	27.0	1,899,500	69,000	27.0	1,863,000
NORTH CENTRAL	**630,400**	**29.4**	**18,510,200**	**607,000**	**28.5**	**17,307,500**
Daniels	37,600	16.1	606,900	23,600	18.0	424,800
Dawson	26,600	12.0	319,200	20,800	12.1	251,900
Garfield	8,500	13.6	115,600	8,500	13.6	115,600
McCone	23,800	9.2	220,000	18,400	11.0	202,400
Richland	21,500	16.0	343,000	11,300	17.3	195,500
Roosevelt	42,400	13.0	551,600	32,300	14.0	452,200
Sheridan	64,100	17.5	1,121,000	31,100	19.0	590,900
Valley	65,800	14.6	962,800	56,000	16.0	897,300
NORTHEASTERN	**290,300**	**14.6**	**4,240,100**	**202,000**	**15.5**	**3,130,600**
Broadwater	6,700	26.9	180,500	5,600	28.5	159,600
Cascade	41,200	33.0	1,358,400	40,100	31.0	1,244,900
Fergus	55,200	24.8	1,367,500	52,900	27.0	1,429,800
Golden Valley	4,800	11.4	54,700	4,200	13.0	54,600
Judith Basin	32,200	17.9	575,400	29,500	21.0	619,500
Lewis & Clark	7,600	21.5	163,200	6,600	26.3	173,400
Meagher	2,600	19.3	50,300	2,600	19.3	50,300
Musselshell	6,700	18.4	123,100	6,400	20.2	129,300
Petroleum	3,400	17.5	59,400	3,300	19.3	63,600
Wheatland	2,100	18.2	38,300	1,800	17.7	31,900
CENTRAL	**162,500**	**24.4**	**3,970,800**	**153,000**	**25.9**	**3,956,900**
Beaverhead	2,900	30.6	88,800	2,100	31.8	66,800
Gallatin	34,100	33.5	1,140,800	33,100	32.4	1,073,000
Jefferson	5,200	14.2	73,800	5,200	14.2	73,800
Madison	9,300	26.7	248,500	7,300	26.0	189,600
Silver Bow	200	27.0	5,400	200	27.0	5,400
SOUTHWESTERN	**51,700**	**30.1**	**1,557,300**	**47,900**	**29.4**	**1,408,600**
Big Horn	25,100	21.2	531,200	21,100	22.3	471,000
Carbon	8,600	28.8	248,000	5,100	22.4	114,000
Park	11,900	23.5	279,200	10,800	23.9	258,600
Stillwater	16,400	18.5	302,800	13,900	17.5	242,700
Sweet Grass	6,300	16.8	105,900	3,900	16.8	65,500
Treasure	5,100	27.3	139,200	2,900	21.2	61,400
Yellowstone	25,800	23.3	601,200	20,000	20.8	415,000
SOUTH CENTRAL	**99,200**	**22.3**	**2,207,500**	**77,700**	**21.0**	**1,628,200**
Carter	7,300	6.5	47,700	7,000	9.0	63,000
Custer	8,200	13.3	109,000	7,200	16.5	118,500
Fallon	27,500	12.3	339,300	24,900	13.0	323,700
Powder River	7,400	10.7	79,300	4,600	14.0	64,400
Prairie	5,600	12.1	67,500	4,800	17.0	81,600
Rosebud	9,100	17.3	157,600	7,700	21.8	168,100
Wibaux	11,600	18.6	216,000	3,100	20.0	62,000
SOUTHEASTERN	**76,700**	**13.3**	**1,016,400**	**59,300**	**14.9**	**881,300**
STATE TOTALS	**1,368,000**	**24.4**	**33,332,000**	**1,180,000**	**24.9**	**29,351,000**

BARLEY

Seeded Acreage by Varieties and Districts—1954
District Acreage As Percent of Total

VARIETY	DISTRICTS							
	West of Divide	North Central	North East	Central	South West	South Central	South East	State Total
Compana								
Acres	33,100	607,000	202,000	153,000	47,900	77,700	59,300	1,180,000
Pct.	57.9	96.3	69.6	94.0	92.6	78.4	77.3	86.3
Titan								
Acres	6,900	11,800	13,200	4,500	3,400	12,600	8,000	60,400
Pct.	12.1	1.9	4.5	2.8	6.6	12.7	10.4	4.4
Horn								
Acres	.....	2,600	24,400	.....	.....	.....	.....	27,000
Pct.	.....	.4	8.4	.....	.....	.....	.....	2.0
Glacier								
Acres	7,000	5,200	6,400	2,200	.....	3,700	1,900	26,400
Pct.	12.2	.8	2.2	1.4	.....	3.7	2.5	1.9
Sanalta								
Acres	.....	.....	14,500	1,900	.....	.....	.....	16,400
Pct.	.....	.....	5.0	1.2	.....	.....	.....	1.2
Vantage								
Acres	300	100	11,500	.....	.....	.....	100	12,000
Pct.	.5	.....	4.0	.....	.....	.....	.1	.9
Trebi								
Acres	6,900	.....	400	100	.....	3,800	.....	11,200
Pct.	12.1	.....	.1	.1	.....	3.8	.....	.8
Other Varieties								
Acres	3,000	3,700	17,900	800	400	1,400	7,400	34,600
Pct.	5.2	.6	6.2	.5	.8	1.4	9.7	2.5
All Varieties	57,200	630,400	290,300	162,500	51,700	99,200	76,700	1,368,000

BARLEY

Acreage, Yield and Production by Varieties—1954
Irrigated and Non-Irrigated

VARIETY	Total			Irrigated			Non-Irrigated		
	Acres Planted	Yield per Planted Acre	Production	Acres Planted	Yield per Planted Acre	Production	Acres Planted	Yield per Planted Acre	Production
		Bushels			Bushels			Bushels	
Compana	1,180,000	24.9	29,351,000	77,200	33.7	2,600,500	1,102,800	24.3	26,750,500
Titan	60,400	25.5	1,540,200	22,400	37.6	842,200	38,000	18.4	698,000
Horn	27,000	15.6	421,200	.....	.....	.....	27,000	15.6	421,200
Glacier	26,400	26.5	699,600	11,000	41.4	455,400	15,400	15.9	244,200
Sanalta	16,400	10.5	172,200	.....	.....	.....	16,400	10.5	172,200
Vantage	12,000	14.1	169,200	1,200	41.5	49,800	10,800	11.1	119,400
Trebi	11,200	27.1	303,500	6,500	33.2	215,800	4,700	18.7	87,700
Other	34,600	19.5	675,100	2,100	36.2	76,000	32,500	18.4	599,100
State	1,368,000	24.4	33,332,000	120,400	35.2	4,239,700	1,247,600	23.3	29,092,300

BARLEY VARIETIES BY COUNTIES

Number of Survey Reports For Each Variety, Irrigated and Non-Irrigated

COUNTY		Compana		Titan		Glacier		Vantage		Trebi		Other [1]	
Name	Number	Irr.	Non-Irr.	Irr.	Non-Irr.	Irr.	Non-Irr.	Irr.	Non-Irr.	Irr.	Non-Irr.	Irr.	Non-Irr.
Beaverhead	1	4	....	1	....	....	....	....	....	....	....	....	....
Big Horn	2	10	16	3	....	2	....	....	....	....	1	....	3
Blaine	3	20	39	2	3	1	1	....	....	....	....	....	....
Broadwater	4	4	3	....	1	....	....	....	....	....	....	....	....
Carbon	5	4	10	3	1	2	1	....	....	2	....	....	1
Carter	6	....	4	....	....	....	....	....	....	....	....	....	2
Cascade	7	9	42	4	....	2	....	....	....	....	....	1	2
Chouteau	8	2	82	1	7	....	1	....	....	....	....	....	3
Custer	9	2	10	2	....	....	....	....	1	....	....	....	1
Daniels	10	....	24	....	....	....	....	....	1	....	....	....	10
Dawson	11	1	21	3	4	3	2	....	....	....	....	....	3
Deer Lodge	12	....	....	....	....	1	....	....	....	....	....	....	....
Fallon	13	....	21	....	....	....	....	....	....	....	....	....	3
Fergus	14	1	56	....	4	....	2	....	....	....	....	....	2
Flathead	15	8	27	1	3	1	1	1	3	....	1	2	2
Gallatin	16	23	33	2	....	....	....	....	....	....	....	1	....
Garfield	17	....	10	....	....	....	....	....	....	....	....	....	....
Glacier	18	2	24	....	....	....	....	....	....	....	....	....	....
Golden Valley	19	1	13	2	1	2	1	....	....	....	....	....	1
Granite	20	2	....	1	....	....	....	....	....	....	....	1	....
Hill	21	2	72	....	5	....	3	....	1	....	....	....	3
Jefferson	22	5	2	....	....	....	....	....	....	....	....	....	....
Judith Basin	23	2	26	....	1	....	....	....	....	....	....	....	1
Lake	24	3	8	3	2	10	5	1	....	5	....	....	5
Lewis and Clark	25	4	11	....	....	2	....	....	....	....	1	....	....
Liberty	26	....	26	....	....	....	1	....	....	....	....	....	1
Lincoln	27	....	....	....	....	....	....	....	....	....	....	1	....
Madison	28	7	5	5	....	....	....	....	....	1	....	....	3
McCone	29	....	23	....	2	....	1	....	4	....	....	....	3
Meagher	30	....	2	....	....	....	....	....	....	....	....	....	....
Mineral	31	....	1	....	....	....	....	....	....	....	1	....	....
Missoula	32	4	5	2	....	....	1	....	....	....	....	....	....
Musselshell	33	....	7	....	1	....	....	....	....	....	....	....	....
Park	34	10	11	2	....	....	....	....	....	....	....	2	3
Petroleum	35	3	1	....	....	....	....	....	....	....	....	1	....
Phillips	36	3	39	....	2	1	....	....	....	....	....	....	2
Pondera	37	22	65	....	....	....	....	....	....	....	....	....	2
Powder River	38	....	8	....	....	....	1	....	....	....	....	....	1
Powell	39	6	5	....	....	....	2	....	....	....	....	....	....
Prairie	40	....	5	....	1	....	1	....	....	....	....	....	2
Ravalli	41	2	4	2	....	8	....	....	....	7	2	3	....
Richland	42	6	19	2	7	....	2	3	4	....	....	1	6
Roosevelt	43	....	31	....	2	....	....	6	....	....	....	....	7
Rosebud	44	3	11	1	1	1	1	....	....	....	....	....	....
Sanders	45	....	7	1	2	1	....	....	1	4	....	....	....
Sheridan	46	....	34	....	3	....	....	....	3	....	1	....	33
Silver Bow	47	2	....	....	....	....	....	....	....	....	....	....	....
Stillwater	48	8	18	6	2	3	1	....	....	....	1	....	....
Sweetgrass	49	2	7	1	2	....	1	....	....	....	....	1	1
Teton	50	18	48	....	2	....	....	....	....	1	....	....	1
Toole	51	1	36	....	....	....	....	....	....	....	....	....	1
Treasure	52	2	6	3	....	1	....	....	....	....	....	....	....
Valley	53	2	72	2	1	3	2	....	1	....	....	....	12
Wheatland	54	1	6	....	....	1	....	....	....	....	....	....	....
Wibaux	55	....	6	....	4	....	1	....	....	....	....	....	2
Yellowstone	56	4	29	13	4	2	....	....	....	1	1	1	1

[1] Includes reports with varieties not named and the following named varieties, coded for location by county number. More than single reports for each variety appear in parenthesis. Example: Horsford was reported once from Flathead County and twice from Lake County.

Frontier—15, 56.
Gem—16, 28.
Hanna—27.
Hannchen—53.
Horsford—15, 24 (2),
Horn—10 (2), 11 (2), 21 (2), 37, 42 (4), 46 (18), 53.
Kindred—10 (2), 13, 46.
Lico—15.
Moore—7, 21, 34 (2), 36, 41, 42, 43, 46 (3), 53, 55.
Montcalm—15, 29, 43 (2), 46 (2), 55.
Moravian—26, 51.
Plains—6.
Plush—46.
Sanalta—10 (6), 14, 24 (2), 43 (3), 46 (2), 53(4).
Spartan—13.
Wisconsin—46.

OATS VARIETIES—1954

Many varieties of oats are grown in Montana but the five most popular varieties, Gopher, Mission, Victory, Bridger and Swedish Select, occupied nearly 89 percent of the total oats seedings in 1954. Exeter, Ajax and Markton varieties were seeded on 4.4 percent of the total oats acreage and 29 other varieties made up the remaining acreage.

Gopher was seeded on 29.3 per cent of the total oats acreage and only one-eighth was on irrigated land. Although grown in all areas of the State, it was the most popular variety in eastern portions last year. Mission seedings in 1954 covered 24.4 percent of the total and a little more than one-fifth was on irrigated land. Also grown generally over the State, it was the most prominent variety in western and north central portions. Victory oats, seeded on 15.9 percent of the total acreage, was the leading irrigated variety last year. Nearly 49 percent of the Victory seedings was on irrigated land. Bridger was seeded on 10 percent of the total acreage and two-thirds was on irrigated land. Swedish Select seedings were on 9.3 percent of the acreage and a little more than one-fifth was irrigated. Nearly all of the Exeter, Ajax and Markton varieties were grown in Eastern Montana on non-irrigated land.

Most of the oats grown in Montana are consumed as feed locally and a small volume is shipped out to terminal markets as cash grain. The crop is suitable to the wide variation of elevation, climate, soils and length of growing season in the State. Oats are a dependable source of hay and pasture feed as well as threshed and unthreshed grain. In recent years, when other types of hay have been in good supply, about one-third of the seeded acreage of oats has been cut green for hay. This accounts for the low yields per seeded acre and for much of the difference of yields by varieties appearing in the table at the bottom of page 16.

Oats played an important roll in the early development of farming and stock raising in Montana. Most of the early settlers and homesteaders seeded their first breaking of sod to oats to provide necessary feed for their draft horses and riding horses. Although draft horses have been almost entirely replaced by mechanical power, oats continues to be grown by many farmers and ranchers as feed for other animals.

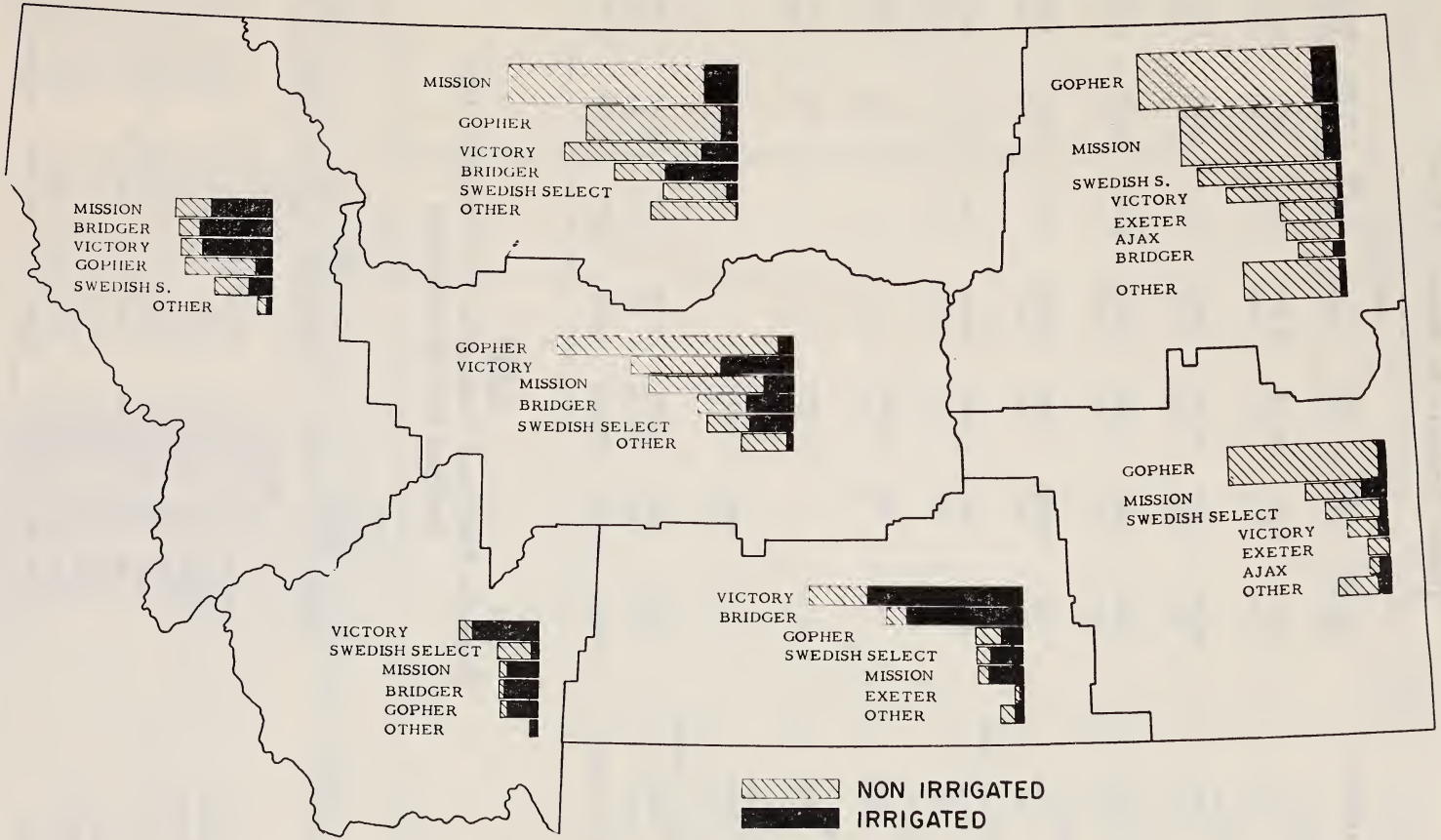
ACREAGE OF WHEAT, BARLEY AND OATS IN MONTANA
For Selective Years 1884 to 1954

	Wheat	Barley	Oats
1884 Acres Harvested	30 000	3,000	58,000
1894 Acres Harvested	55,000	11,000	101,000
1904 Acres Harvested	145,000	24,000	198,000
1914 Acres Harvested	1,655,000	45,000	560,000
1918 Acres Harvested	.....	.....	650,000*
1924 Acres Harvested	3,441,000	85,000	550,000
1934 Acres Planted	3,661,000	172,000	388,000
1944 Acres Planted	4,507,000	643,000	497,000
1953 Acres Planted	6,185,000*	.....	.....
1954 Acres Planted	4,710,000	1,368,000*	573,000

*Record high acreage to 1954.

OATS - 1954

Relative Acreage Seeded - by Districts and Varieties



OATS

Seeded Acreage By Varieties and Districts—1954

District Acreage As Percent of Total

VARIETY	DISTRICTS							
	West of Divide	North Central	North East	Central	South West	South Central	South East	State Total
Gopher								
Acres	9,200	31,200	61,500	24,500	4,000	5,400	32,300	168,100
Pct.	20.0	24.8	34.7	30.2	15.6	9.9	51.5	29.3
Mission								
Acres	10,000	47,500	50,100	15,200	4,100	4,800	8,300	140,000
Pct.	21.7	37.8	28.3	18.8	16.0	8.8	13.2	24.4
Victory								
Acres	9,600	17,700	12,000	16,900	8,400	22,100	4,100	90,800
Pct.	20.9	14.1	6.8	20.8	32.8	40.5	6.5	15.9
Bridger								
Acres	9,700	12,700	4,600	10,000	4,100	14,200	1,800	57,100
Pct.	21.1	10.1	2.6	12.3	16.0	26.0	2.9	10.0
Swedish Select								
Acres	6,000	7,600	14,900	9,000	4,400	5,100	6,300	53,300
Pct.	13.0	6.0	8.4	11.1	17.2	9.3	10.0	9.3
Exeter								
Acres	.....	600	6,500	.....	.....	600	2,300	10,000
Pct.	.....	.5	3.7	.....	.....	1.1	3.7	1.7
Ajax								
Acres	.....	.....	6,100	.....	.....	300	2,100	8,500
Pct.	.....	.....	3.4	.....	.....	.5	3.3	1.5
Markton								
Acres	100	4,600	1,900	.....	.....	.....	.....	6,600
Pct.	.2	3.7	1.1	.....	.....	.....	.....	1.2
Other Varieties								
Acres	1,400	3,800	19,600	5,500	600	2,100	5,600	38,600
Pct.	3.1	3.0	11.0	6.8	2.4	3.9	8.9	6.7
All Varieties	**46,000**	**125,700**	**177,200**	**81,100**	**25,600**	**54,600**	**62,800**	**573,000**

OATS

Acreage, Yield and Production by Varieties—1954

Irrigated and Non-Irrigated

VARIETY	Total			Irrigated			Non-Irrigated		
	Acres Planted	Yield per Planted Acre	Production	Acres Planted	Yield per Planted Acre	Production	Acres Planted	Yield per Planted Acre	Production
		Bushels			Bushels			Bushels	
Gopher	168,100	15.3	2,571,900	21,200	33.6	712,300	146,900	12.7	1,859,600
Mission	140,000	17.6	2,464,000	30,400	33.8	1,027,500	109,600	13.1	1,436,500
Victory	90,800	21.0	1,906,800	44,100	31.6	1,393,600	46,700	11.0	513,200
Bridger	57,100	36.3	2,072,700	38,100	43.3	1,649,700	19,000	22.3	423,000
Swedish Select	53,300	19.2	1,023,400	12,600	32.5	409,500	40,700	15.1	613,900
Exeter	10,000	22.5	225,000	1,100	41.7	45,900	8,900	20.1	179,100
Ajax	8,500	16.2	137,700	1,500	37.8	56,700	7,000	11.6	81,000
Markton	6,600	7.8	51,500	.....	.....	.....	6,600	7.8	51,500
Other	38,600	18.1	698,000	3,900	38.0	148,200	34,700	15.8	549,800
State	573,000	19.5	11,151,000	152,900	35.6	5,443,400	420,100	13.6	5,707,600

OATS VARIETIES BY COUNTIES

Number of Survey Reports For Each Variety, Irrigated and Non-Irrigated

COUNTY		Gopher		Mission		Victory		Bridger		Swedish Select		Other[1]	
		Non-		Non-		Non-		Non-		Non-		Non-	
Name	Number	Irr.	Irr.	Irr.	Irr.	Irr.	Irr.	Irr.	Irr.	Irr.	Irr.	Irr.	Irr.
Beaverhead	1	3	....	....	....	2	....	....	....	....	....	....	1
Big Horn	2	1	2	1	1	1	....	1	2	....	1	....	2
Blaine	3	3	4	8	8	2	4	4	....	2	2	1	3
Broadwater	4	....	....	....	....	2	1	1	1	1	2	1	....
Carbon	5	....	....	1	....	12	3	11	....	1	1	9	5
Carter	6	....	4	....	1	....	....	....	....	....	1	....	4
Cascade	7	2	18	6	8	2	3	6	....	....	....	2	5
Chouteau	8	....	16	....	4	....	4	....	2	1	2	....	7
Custer	9	1	4	4	....	....	....	2	....	....	....	2	2
Daniels	10	....	3	....	4	....	1	....	1	....	1	....	4
Dawson	11	6	16	....	4	....	4	1	2	1	3	2	5
Deer Lodge	12	....	....	....	....	....	....	....	....	....	....	....	....
Fallon	13	1	10	....	1	....	2	....	....	....	1	....	4
Fergus	14	....	2	....	9	....	4	....	2	....	4	....	5
Flathead	15	2	21	1	10	1	4	1	1	....	2	2	4
Gallatin	16	1	1	4	2	6	5	6	1	1	5	2	....
Garfield	17	....	4	....	1	....	3	....	....	....	3	....	2
Glacier	18	....	2	....	2	....	1	....	1	....	....	....	2
Golden Valley	19	....	1	....	3	2	3	2	....	1	3	1	4
Granite	20	....	....	3	....	....	....	....	....	1	....	1	....
Hill	21	....	8	....	9	....	1	....	3	....	3	....	4
Jefferson	22	....	....	1	....	1	....	....	....	....	....	....	....
Judith Basin	23	....	8	1	4	1	2	....	1	....	....	....	2
Lake	24	....	....	3	3	10	5	14	4	1	3	2	2
Lewis and Clark	25	....	3	1	....	4	....	3	....	1	....	2	2
Liberty	26	....	2	....	3	....	....	....	....	....	....	....	....
Lincoln	27	1	1	3	2	....	....	....	....	....	1	....	....
Madison	28	2	1	2	1	5	1	4	....	3	....	....	3
McCone	29	2	9	....	2	....	5	....	1	....	2	....	8
Meagher	30	....	....	....	....	....	....	....	1	2	....	....	....
Mineral	31	....	....	....	....	....	....	....	....	....	....	....	....
Missoula	32	....	1	2	1	....	....	1	....	....	2	....	....
Musselshell	33	....	1	....	4	1	....	1	....	....	1	....	....
Park	34	3	....	2	2	7	1	2	1	6	1	....	2
Petroleum	35	1	....	....	....	....	....	....	....	....	....	....	1
Phillips	36	1	5	3	14	2	12	3	2	....	....	....	10
Pondera	37	3	2	5	6	1	2	1	....	....	....	1	1
Powder River	38	1	7	....	3	....	....	....	....	....	2	....	1
Powell	39	....	2	1	1	1	1	....	3	1	1	1	1
Prairie	40	1	5	....	....	....	1	1	2	....	....	1	2
Ravalli	41	2	....	2	1	11	....	8	2	1	....	4	....
Richland	42	10	10	9	6	1	2	....	....	1	1	3	8
Roosevelt	43	....	10	....	13	....	1	....	....	....	3	1	11
Rosebud	44	....	9	....	3	1	2	....	....	1	1	....	....
Sanders	45	1	2	2	1	1	....	2	....	1	2	....	1
Sheridan	46	....	12	....	14	....	1	....	....	....	2	....	15
Silver Bow	47	....	....	2	....	....	....	....	....	....	....	....	....
Stillwater	48	1	7	....	....	1	1	5	3	....	3	1	1
Sweet Grass	49	3	1	....	1	6	2	2	1	....	....	2	1
Teton	50	2	3	5	11	8	2	7	1	....	....	....	3
Toole	51	....	5	2	4	....	2	....	....	....	....	....	....
Treasure	52	....	4	2	....	....	....	1	....	....	....	1	1
Valley	53	2	18	3	22	1	5	3	....	....	2	....	5
Wheatland	54	....	2	....	....	1	3	1	....	1	....	1	3
Wibaux	55	....	4	....	1	....	2	....	....	....	....	....	2
Yellowstone	56	....	2	5	1	10	1	13	....	....	1	3	1

[1] Includes reports with varieties not named and the following named varieties, coded for location by county number. More than single reports for each variety appear in parenthesis. Example: Bonda was reported twice from Golden Valley County, and once each from Richland and Wheatland Counties.

Abequilt—7.
Ajax—10, 11, 34, 40 (2), 42, 43 (2), 46 (2), 53, 55.
Beaver—19.
Bishop—14.
Bonda—19 (2), 42, 54.
Branch—10, 43.

Cherokee—6, 13 (2), 43, 46 (4).
Clinton—5, 6, 18, 29 (2), 34, 50.
Cody—5.
Common—20, 56 (2).
Eaton—14.
Exeter—3, 5, 21, 29, 42 (6), 43, 46 (2), 55, 56 (2).
Golden Rain—11 (2).
Idamine—11.
James Hulless—36.
Liberty—24.

Lorraine—35, 43 (2).
Marion—13, 29 (3), 41, 43, 46 (3).
Markton—8, 21, 36 (6), 45, 46 (2), 53 (2).
Native—54.
Overland—9 (3), 29, 40.
Park—5 (3), 7 (2), 15 (3), 16 (2), 24, 25, 28, 36, 39, 43.
Ranger—53.
Sawallis—39.
Shelby—8.
Silver Mine—15.
Sixty Day—8, 13.
Swalf—24.
Toma—38.
Vanguard—29, 50.
Vicland—10.
Yellow from Iowa—3.

SUPPLY AND DISPOSITION OF BARLEY AND OATS—1954

In 1954 the production of barley was nearly two and one-fourth times the size of the 1953 crop and nearly double the average for the previous decade. Oats production was slightly below the previous year and about 6 percent less than average. On April 1, 1955, barley stocks on farms were more than 3 times the 10-year average and nearly twice those of a year earlier. Farm stocks of oats were 5 percent more than a year ago and 13 percent above average. A little more than half of the total stocks of barley was then under government loan.

The area location of the State's barley and oats stocks and disposition of the 1954 supply oppear in the following table. Between April 1 and July 1, 1955, the stocks of barley were sharply reduced by the marketing of much of that under government loan.

	Total Supply [1]	Quantity Used and to be Used Between July 1, 1954 & July 1, 1955		Quantity Sold Between July 1, 1954 and April 1, 1955		Total Quantity on Hand April 1, 1955	Quantity Under Government Loan April 1, 1955
		For:		To:			
		Seed	Feed	Local Elevators	Others		
	Bushels						
BARLEY							
W. of Divide	2,490,500	128,100	1,183,800	278,100	135,400	957,000	142,700
North Cent.	21,126,700	688,400	1,351,300	3,461,500	536,600	16,563,800	10,551,500
North East	5,267,500	380,300	1,149,200	572,400	211,800	3,442,900	1,350,500
Central	5,000,500	238,900	1,322,400	691,000	99,300	2,975,200	1,194,900
South West	1,964,400	76,700	700,800	347,300	63,900	941,800	247,800
South Cent.	3,216,200	154,600	1,454,800	454,700	207,300	1,189,200	143,800
South East	1,538,200	90,000	724,700	125,000	43,700	725,100	111,900
State	**40,604,000**	**1,757,000**	**7,887,000**	**5,930,000**	**1,298,000**	**26,795,000**	**13,743,100**
OATS							
W. of Divide	1,936,700	110,100	1,199,700	134,700	122,000	831,000	15,400
North Cent.	2,758,200	208,500	1,466,400	237,000	110,800	1,418,000	29,800
North East	3,724,400	265,600	2,123,300	113,100	143,600	1,879,000	27,700
Central	2,638,200	136,500	1,851,200	78,200	90,900	1,113,200	7,000
South West	1,289,800	61,400	778,200	122,600	33,900	595,400	24,500
South Cent.	2,291,100	111,300	1,478,900	138,600	246,500	836,000	5,600
South East	1,406,800	99,600	798,900	53,900	38,300	770,400	6,600
State	**16,045,200**	**993,000**	**9,696,600**	**878,100**	**786,000**	**7,443,000**	**116,600**

[1] Quantity produced in 1954, plus quantity on hand July 1, 1954, and purchased after July 1, 1954 for feed and seed.

[2] Quantity stored on farms and in commercial elevators and warehouses. Includes part of quantity fed and to be fed, Col. 3; and all of the quantity under government loan, Col. 7.